What Is Claimed Is:

1. A method of making a stackable microcircuit layer comprising the steps of:

providing a plastic encapsulated microcircuit (PEM) that includes

(a) a microcircuit having an active surface containing integrated circuitry and a bond pad, and

(b) an encapsulant in contact with the microcircuit; and

modifying the PEM to produce a modified PEM having a modified surface on which modified surface is exposed a conductive member that is electrically connected to the bond pad.

2. The method of Claim 1 further comprising the step of forming an electrical lead on the modified surface of the modified PEM that leads from the conductive member to an edge of the modified PEM

3. The method of Claim1 wherein the microcircuit is a pre-tested microcircuit.

4. The method of Claim 1 wherein the microcircuit is a burned-in microcircuit.

5. The method of Claim 2 wherein the modifying step is accomplished through grinding.

6. The method of Claim 2 comprising the further step of covering the electrical lead with an insulating layer.

7. The method of Claim 1 comprising the further step of reducing the thickness of the modified PEM by thinning a backside of the modified PEM that is opposite to the electrical lead.

8. The method of Claim 7 wherein the step of reducing the thickness of the modified PEM by thinning a back side of the modified PEM is accomplished through grinding.

9. The method of Claim 1 comprising the further step of reducing the area of the modified PEM.

10. The method of Claim 9 wherein the further step reducing the area of the modified PEM is accomplished by sawing the modified PEM along one or more edges.

11. The method of Claim 1 wherein the conductive member that electrically connects to the bond pad is part of a wire bond.

12. The method of Claim 11 wherein the conductive member is a gold ball bond.

13. The method of Claim 11 wherein the conductive member is a wire.

14. The method of Claim 11 wherein the conductive member is a wedge bond.

15. The method ofClaim 11 wherein the conductive member is a lead frame.

16. The method of Claim 1 wherein the conductive member that electrically connects to the bond pad is a conductive trace on a flexible substrate.

17. The method of Claim 16 wherein the conductive trace is a flexible lead beam and the flexible substrate is a polyimide film.

18. The method of Claim 1 wherein the PEM's encapsulant is a plastic body that at least partially encapsulates the microcircuit.

19. The method of Claim 18 wherein the conductive member that is electrically connected to the bond pad is encapsulated in the plastic body of the PEM and wherein the modifying step comprises thinning a first side of the PEM to expose the conductive member.

20. The method of Claim 19 wherein the PEM comprises a thin small outline package (TSOP) containing a gold ball bond, a lead frame, and a wire that are collectively encapsulated in the plastic body of the PEM, wherein the gold ball bond is formed on the bond pad, wherein the wire connects the gold ball bond to the lead frame, and wherein the gold ball bond is the conductive member exposed on the modified surface of the modified PEM through thinning.

21. The method of Claim 20 wherein the thinning removes the lead frame and the wire along with a portion of the plastic body.

22. The method of Claim 18 wherein the PEM comprises a uBGA package that includes a polyimide film and a flexible lead beam that are collectively encapsulated in the plastic body, wherein one end of the flexible lead beam is connected to the bond pad, and wherein a solder ball is deposited onto an exterior side of the polyimide film in contact with an opposite second end of the flexible lead beam.

23. The method of Claim 22 wherein the modifying step comprises removing at least a portion of the solder ball.

24. The method of Claim 23 wherein the removing of at least a portion of the solder ball is accomplished by heating the solder ball to form molten solder and wicking away the molten solder.

25. The method of Claim 24 wherein the he removing of at least a portion of the solder ball is accomplished by shearing.

26. A method of making a stackable microcircuit layer comprising the steps of:

providing a plastic encapsulated microcircuit (PEM) that includes:

(a) a microcircuit having a bond pad,

(b) a conductive lead assembly connected to the bond pad, and

(c) a plastic body encapsulating the microcircuit, the bond pad, and at least part of the conductive lead assembly; and

grinding a top surface of the PEM to remove a top portion of the plastic body along with at least part of the conductive lead assembly to leave a planar section that contains the microcircuit and the bond pad.

27. The method of Claim 26 further comprising the step of forming an electrical lead on top of the planar section which leads from the bond pad of the microcircuit to at least one edge of the planar section.

28. The method of Claim 26 wherein the grinding step also leaves a vestigial part of the conductive lead assembly in the planar section.

29. The method of Claim 26 wherein the vestigial part of the conductive lead assembly is a part of a wire bond.

30. A method of making a stackable microcircuit layer comprising the steps of:

providing a plastic encapsulated microcircuit (PEM) that includes

(a) a microcircuit having an active surface containing integrated circuitry and a bond pad,

(b) a wire bond connected to the bond pad, a lead frame, and a wire that connects the wire bond to the lead frame, and

(d) a plastic body that encapsulates the known-good microcircuit, the wire bond, the wire, and at least a portion of the lead frame;

grinding a surface of the PEM to remove the lead frame and the wire and form a modified PEM that contains the microcircuit, the bond pad, and the wire bond, the modified PEM having a modified surface on which modified surface is exposed the wire bond that is connected to the bond pad; and

forming an electrical lead on the modified surface that leads from the wire bond to an edge of the modified PEM.

31. The method of Claim 30 wherein the PEM has a package fom factor known as a thin small outline package (TSOP).

32. The method of Claim 30 comprising the further step of covering the electrical lead with an insulating layer.

33. The method of Claim 30 comprising the further step of reducing the thickness of the modified PEM by thinning a backside of the modified PEM that is opposite to the electrical lead.

34. The method of Claim 30 comprising the further step of reducing the area of the modified PEM.

35. The method of Claim 34 wherein the further step educing the area of the modified PEM is accomplished by sawing the modified PEM along one or more edges.

36. A stackable microcircuit layer comprising:

(1) a modified section of a plastic encapsulated microcircuit (PEM) that originally contained (a) a known-good microcircuit having a bond pad, (b) a conductive lead assembly connected to the bond pad, and (c) a plastic body encapsulating the known-good microcircuit, the bond pad, and the conductive lead assembly,

the modified section formed by removing a portion of the conductive lead assembly from the PEM;

the modified section having a modified surface,

the modified section containing the known-good microcircuit, the bond pad, and a remaining portion of the conductive lead assembly with an end thereof exposed on the modified surface; and

(2) a reroute lead on the modified surface of the modified section to connect the exposed portion of the remaining portion of conductive lead assembly with an edge of the modified section.

37. The stackable microcircuit layer of Claim 36wherein the commercially packaged microcircuit assembly has a package form factor known as a thin small outline package (TSOP).

38. The stackable microcircuit layer of Claim 37 wherein the modified section is a planar section containing the known-good microcircuit, the bond pad, the remaining portion of the conductive lead assembly, and a reduced-height portion of the plastic body.

39. The stackable microcircuit layer of Claim 38 wherein the conductive lead assembly originally comprises a wire bond, a lead frame, and a wire that are collectively encapsulated in the plastic body of the PEM, wherein the wire bond is formed on the bond pad, and wherein the wire connects the wire bond to the lead frame.

40. The stackable microcircuit layer of Claim 39 wherein the remaining portion of the conductive lead assembly that is exposed on the modified surface is the wire bond.

41. The stackable microcircuit layer of Claim 40 wherein the wire bond is exposed on the modified surface by grinding away a portion of the plastic body along with the lead frame, the wire, and a portion of the wire bond.

42. The stackable microcircuit layer of Claim 36 wherein the commercially packaged microcircuit assembly has a package form factor known as a micro-Ball Grid Array (uBGA) package.

43. The stackable microcircuit layer of Claim 42 wherein the modified section contains the known-good microcircuit, the bond pad, the remaining portion of the conductive lead assembly, and the plastic body.

44. The stackable microcircuit layer of Claim 43 wherein the conductive lead assembly originally comprises a conductive trace, a flexible substrate that supports the conductive trace, and a solder ball, a first end of the conductive trace connected to the bond pad and a second end of the conductive trace connected to the solder ball.

45. The stackable microcircuit layer of Claim 44 wherein the remaining portion of the conductive lead assembly that is exposed on the modified surface is the second end of the conductive trace.